



Pascall's Quality System
Is Registered Under
BS EN ISO 9001



PM 13274
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Pascall

HIGH DYNAMIC RANGE

MINIATURE LOG AMPLIFIERS

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ILM SERIES



Model No. UMSDB	Centre Freq. MHz	Bandwidth MHz	Dynamic Range dB	Rise Time nsec	Fall Time nsec
UMSDB Series (Linearity ± 1.0dB)					
UMSDB-1002	10	2	70	500	1000
UMSDB-2005	20	5	70	200	500
UMSDB-3010	30	10	70	100	250
UMSDB-3010	30	10	70	90	230
UMSDB-6020	60	20	70	45	120
UMSDB-7010	70	10	70	90	230
UMSDB-7020	70	20	70	45	120
UMSDB-7040	70	40	70	30	90
UMSDB-12020	120	20	60	45	120
UMSDB-12040	120	40	60	30	60
UMSDB-16040	160	40	60	30	60
UMSDB-16080	160	80	60	20	40

Linearity is defined as the deviation from the best fit straight line to the measured data.
All the above parameters are specified @ +25°C.

Additional Specifications

Linearity, max deviations	MSDB	UMSDB
@ Centre Frequency and +25°C	± 1 dB, 0.7dB Typ.	25mV/dB nominal
Over 0°C to +60°C	± 1.5 dB	± 1.5 dB
Over -45°C to +85°C	± 2.0 dB	± 2.0 dB
Log slope	25mV/dB nominal	25mV/dB nominal
Max. variation with temperature:		
0°C to +60°C	$\pm 3\%$	$\pm 3\%$
-45°C to +85°C	$\pm 5\%$	$\pm 5\%$
Video output DC coupled into 100 ohms.		
Output range	1.75V(Nom.)	1.75V(Nom.)
Offset adjust	± 100 mV	
Max offset change with temperature		
0°C to +60°C	± 20 mV	± 20 mV
-45°C to +85°C	± 40 mV	± 45 mV
Limited IF Output		
Into 50 ohms	0dBm ± 2 dB	0dBm ± 2 dB
Input VSWR	1.5:1	1.5:1
Power requirements, ± 12 V or ± 15 V	+ve 60mA max +ve 85 mA max	+ve 60mA max +ve 85 mA max
Weight	65g max	30g

Optional Features

- Limited I.F. Output
- Matched pairs at 25°C, ± 1 dB
- Log slope in the range 15-40 mV/dB
- SMA, SMB or SMC connectors
- ± 12 V or ± 15 V supply voltage
- Extended temperature range,
-55°C to 100°C

DIMENSIONS in mm. **FINISH** Bright tin, generally in accordance with MIL-T-10727 Type 1 Bright.

